#### IT'S A MONDAY SCHEDULE TODAY!

MIT's Oldest and Largest Newspaper

tech.mit.edu



WEATHER, p. 2

TUE: 48°F | 32°F Afternoon showers

WED: 37°F | 22°F Mostly sunny

THU: 35°F | 25°F Partly cloudy

Tuesday, February 19, 2013

# **Brass Rat unveiled:** 2015 Ring Premiere

#### Ring features Pokémon, Curiosity

By Bruno B. F. Faviero STAFF REPORTER

Volume 133, Number 5

It was a chilly 37-degrees as the Class of 2015 began to amass along the perimeter of Kresge on Friday. They came in droves — fraternities, sororities, halls, clubs - all individual groups, and yet on this night united for one reason: the premiere of the Class of 2015 Brass Rat.

As one of the few events that brings the whole class together, it almost felt like a tailgating party. Each group entertained itself in different ways: One sang Jason Mraz' "I'm Yours" to the rhythm of a ukulele, another belted out the "Engineers' Drinking Song" and some sort of ode to East Campus.

Others were discussing what might be on the ring. The Curiosity Mars rover and a DeLorean (the future of Back to the Future II is set in 2015) were guessed by a few students. The growing line snaked around Kresge, and by 7:10 p.m. it was already close to the door of the Z-Center.

At 7:45, the doors opened and people slowly trickled in as each of the first 600 got a ticket for the giveaways. One lucky '15, Audrey A. Sedal, won a free Brass Rat for being the 15th in line — clever. On the inside, it almost seemed like a class reunion — people gave each other flying hugs, and groups coordinated their clothes or body paint, or had signs with the name of the person they were there to cheer for. Ringcomm taking the stage turned into a shouting match of whose name could be screamed the loudest.

I made the mistake of sitting next to the Alpha Phi and Sigma Kappa sections, and so all I heard for the rest of the night was "MEGHAN!!!" and "WE LOVE COL-LEEN!" When Ringcomm Chair Matthew T. "Matt" Abel '15 and

Premiere, Page 7



Ring Committee Chair Matthew T. Abel '15 and Vice Chair Michelle H. Lee '15 introduce the rest of the com-

#### Macklemore is Spring Weekend headliner

The Undergraduate Association (UA) Events Committee has announced Macklemore featuring Ryan Lewis as the headliner for Spring-Fest 2013, MIT's annual concert event. The concert will be on April 26 in Johnson, and the opener will be determined in the coming weeks. A survey sent by the committee in the fall showed "overwhelming" support for Macklemore, according to committee mem-

ber Daniela M. Yuschenkoff '14. The survey included other artists that, according to Yuschenkoff, were not touring far away or recording at the time of the concert, and also asked students what genres of music they would prefer.

Macklemore was a "dominant" choice, said Yuschenkoff. "We're lucky to have him." Reactions around campus were mostly positive in a man-on-the-street survey conducted by The Tech, but responses ranged from "Damn, that's cool" and "I'll actually go this year," to "It's a band I've heard of" and "who is Macklemore?'

Tickets will go on presale for MIT students only on March 1 for \$15. General public tickets will go on sale on March 8, costing \$20 for MIT student and \$25 for non-MIT purchasers.

-Bruno B. F. Faviero



EMILY KELLISON-LINN-THE TECH

A large crowd gathers at the Harvard-MIT Math Tournament awards ceremony on Saturday evening in 26-100.

#### **FROM MENTEE**

**TO MENTOR** 

On research and lessons learned from vour mentors.

CAMPUS LIFE, p. 9

#### ON THIS DAY IN HISTORY...

Thomas Edison patented the phonograph on Feb. 19, 1878.

#### AND EXACTLY 11 YEARS AGO...

NASA's Mars Odyssey began mapping the surface of planet Mars.



#### Monday night marked the first State of the UA address, headed by UA President Jonte D. Craighead '13. "I am confident in saying that [the

Small crowd attends first State of the

**Undergraduate Association address** 

UA] is in a much better position than we were two years ago," Craighead said at the opening of the forum. About 20 students attended the fo-

rum portion of the event, with more students around at the end just to eat the food. Craighead mentioned that the address was meant to be an experimental addition to the periodic UA study breaks that occur throughout the term - he attributed low attendance to the timing of the event, both to being earlier in the evening and falling on a Monday after a long weekend, when students are

likely to be inside doing work. In relation to how the UA's performance now compared to before the reconstruction, Craighead that it would be "much more difficult in the old structure" to get the things done that the UA has in the past year. Craighead said that it is much easier to make validate a statement about student opinion when you have the student leaders of the living groups — each of the dorm presidents and representatives from the IFC, Panhel, and the ILGs — all in the same place at the UA Council meetings.

The speech was given in parts by Craighead, Vice President Michael P. Walsh '13, Chair of the UA committee on education Naren P. Tallapragada '13, Secretary General Christine M. Sowa '14, and Finboard Chair Johnathan Kongoletos '14. The presentation outlined what the UA has been doing in the past semester and some of the initiatives that they have put forth, such as the Costco-Target shuttle. The main motivation behind giving these presentations, according to Craighead, was to reach out to the students more and let them know that the UA is actively working to improve life for stu-

—Stan Gill

#### **IN SHORT**

THE UNVEILING OF

And another class sees

their future Brass Rats!

Premiere. PHOTO, p. 8

Inside the 2015 Ring

**THE 2015 BRASS RAT** 

Minor completion forms for final-term seniors are due this Friday.

The deadline for CPW events is this

Choose to Re-Use is this Thursday at the mirror sculpture in Stata. Bring stuff starting at 8 a.m., and come to grab things at 11

#### PSC Summer expedition grant applications are due on Feb. 22. Check http://

web.mit.edu/mitpsc/expedition for more information.

The deadline for EECSCon submissions is tonight at midnight! Turn in your abstract at http://eecscon.mit.edu.

Send news information and tips to news@tech.mit.edu.

#### **LUNAR NEW YEAR AWAY FROM HOME**

Crowding into Ashdown to celebrate the holiday.

CAMPUS LIFE, p. 9

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#### Netanyahu's ice cream budget causes political stir

JERUSALEM — His foreign minister had to resign after being accused of fraud. He was sharply criticized for his government's handling of Prisoner X, who committed suicide in prison. And now this, which made front-page news in Israel this weekend: Prime Minister Benjamin Netanyahu stands accused of dipping into state coffers for an ice cream budget of \$2,700

Pistachio, it was revealed by the proprietors of a gourmet ice cream parlor a couple of blocks from the prime minister's official residence, is his favorite (presumably not made with the Iranian kind of nut). Mrs. Netanyahu, they said, appears to prefer French vanilla.

In a country facing severe cuts in government spending after an election that focused largely on the struggling middle class, and with the Netanyahus' supposed taste for the high life already under scrutiny, news of the prime minister's weakness for artisanal pistachio ice cream raised a national outcry.

Shelly Yachimovich, the leader of the center-left Labor Party, summed it up as a Marie Antoinette moment and noted that Netanyahu was the one who always spoke of cutting the fat.

"If there's no bread, eat ice cream," she wrote on her Facebook page, adding, "Shall we laugh or cry?"

–Isabel Kershner, The New York Times

#### Russians wade into the snow to seek treasure from the sky

DEPUTATSKOYE, Russia — Ever since the meteor exploded somewhere over this impoverished Siberian town, Larisa V. Briyukova wondered what to do with the fist-size stone she found under a hole in the roof tiles of her woodshed.

On Monday, a stranger knocked on her door, offering about \$60, Briyukova said. After some haggling, they settled on a price of \$230.

A few hours later, another man pulled up, looked at the hole in the roof and offered \$1,300.

"Now I regret selling it," said Briyukova, a 43-year-old homemaker. "But then, who knows? The police might have come and

On Friday, terror rained from the skies, blowing out windows and scaring people over an enormous swath of Siberia. But by Monday, for many people what fell from the sky had turned to pure gold, and it touched off a rush to retrieve the fragments, many buried in deep February snows.

-Andrew E. Kramer, The New York Times

#### Leak in fuel line cause of cruise ship's trouble

A U.S. Coast Guard official said Monday that the fire that disabled the Carnival Triumph cruise ship began when a fuel line connected to one of the vessel's engines sprang a leak.

"It sprayed oil onto a hot surface and caught on fire," the official, Lt. Cmdr. Teresa Hatfield, said at a news conference. The leak occurred in a flexible part of a return line, she said, rather than a line that was feeding fuel to the engine.

Hatfield, who is leading the Coast Guard's investigation into the episode, said that interviews with members of the vessel's crew indicated that they had responded appropriately to the fire. She also said the Triumph's fire suppression system had worked properly.

However, the fire destroyed the vessel's generators, apparently because intense heat forced the crew to abandon the engine room. As a result, the ship lost power and electricity, leaving it stranded in the Gulf of Mexico.

"Any time you have a fire, you are going to have damage because you have to close the room and leave the room closed for a period of time to allow the engine room to cool," Hatfield said.

-Barry Meier, The New York Times

## Pipeline call gives Obama new problems either way

By John M. Broder, Clifford Krauss, and Ian Austen

THE NEW YORK TIMES

WASHINGTON — President Barack Obama faces a knotty decision in whether to approve the much-delayed Keystone oil pipeline: a choice between alienating environmental advocates who overwhelmingly supported his candidacy or causing a deep and perhaps lasting rift with Canada.

Canada, the United States' most important trading partner and a close ally on Iran and Afghanistan, is counting on the pipeline to propel more growth in its oil patch, a vital engine for its economy. Its leaders have made it clear that an American rejection would be viewed as an unneighborly act and could bring retaliation.

Secretary of State John Kerry's first meeting with a foreign leader was with Canada's foreign minister, John Baird, on Feb. 8. They discussed the Keystone pipeline project, among other subjects, and Kerry promised a fair, transparent and prompt decision. He did not indicate what recommendation he would make to the president.

But this is also a decisive moment for the U.S. environmental movement, which backed Obama strongly in the last two elections. For groups like the Sierra Club, permitting a pipeline carrying more than 700,000 barrels a day of Canadian crude into the country would be viewed as a betrayal, and as a contradiction of the president's promises in his second inaugural and State of the Union addresses to make controlling climate change a top priority for his second term.

On Sunday, thousands of protesters rallied near the Washington Monument to protest the pipeline and call for firmer steps to fight emissions of climate-changing gases. Groups opposing coal production, fracking for natural gas, and nuclear power were prominent; separate groups of Baptists and Catholics, as well as an interfaith coalition, and groups from Colorado, Toronto and Minneapolis joined the throng.

One speaker, the Rev. Lennox

Yearwood, compared the rally to Martin Luther King's 1963 March on Washington for civil rights, but, he said, "while they were fighting for equality, we are fighting for existence." In front of the stage was a mockup of a pipeline, looking a bit like the dragon in a Chinese new year parade, with the motto, "separate oil and state."

Michael Brune, executive director of the Sierra Club, predicted that Obama would veto the \$7 billion project because of the adverse effects development of the Canadian oil sands would have on the global climate.

"It's rare that a president has such a singular voice on such a major policy decision," Brune said. "Whatever damage approving the pipeline would do to the environmental movement pales in comparison to the damage it could do to his own legacy."

Brune was one of about four dozen pipeline protesters arrested at the White House on Wednesday, in an act of civil disobedience that was a first for the 120-year-old Sierra Club.

## When being unemployed is a barrier to finding a job

By Winnie Hu

NEW YORK — The sign outside the diner said help wanted. But when Albert Mango said he was out of work, he was told there was no opening

Kevin Johnson tells people he works off the books rather than admit to being unemployed, because he fears being seen as lazy and unmotivated.

And Barbara Brown, a former office manager, has learned that a telltale sign that she is not getting a job is when she is asked why she has been job hunting for a year and a half.

These Bronx residents are among the growing ranks of New Yorkers who say they are trapped in a vicious circle of unemployment — rejected time and time again for jobs that could put food on the table, resurrect stalled careers and pull them out of a downward spiral of debt.

Despite their qualifications and experience, these job seekers contend that they have not been given a fair shot because of one counterintuitive reason: They are already unemployed.

"I'll do anything — but somebody has to be willing to hire me," said Mango, 43, who has not worked in nine months and said he lost his home because he could not pay the rent. "If you're not working, that's already Strike 1 against you.'

New York City appears likely to adopt a law that would allow unsuccessful job applicants to sue businesses who they believe hold their unemployment status against them in making hiring decisions. The measure is widely seen as the toughest step yet in a flurry of recent efforts by the Obama administration and elected officials in at least 18 states, including New York, to help the long-term unemployed.

The District of Columbia passed

10001

a law last year that made it illegal for employers to refuse to consider or hire candidates because they were out of work, and barred advertisements from suggesting that the unemployed need not apply. Laws prohibiting discrimination in job listings have also been adopted by New Jersey and Oregon; a similar measure in California was vetoed by the governor.

Though businesses are reluctant to acknowledge bias in their hiring practices, some human-resource managers and consultants say privately that unemployment can be a red flag on a resume, signaling that a worker may have outdated skills, or may be a short-timer who is desperate enough to take any work now but will leave when something better comes along. The National Employment Law Project, a nonprofit advocacy group, reported that companies across the country often posted job notices explicitly excluding applicants who are unemployed.

40°N

35°N

**WEATHER** 

#### Rain tonight, followed by a dry week

By Allison A. Wing

STAFF METEOROLOGIST

The Boston area received a quick blast of winter weather on Sunday, when Logan Airport recorded 5.1 inches of snow. The fresh snow on top of the ice-coated snow remaining from the previous weekend's snow storm made for slippery conditions. The cold temperatures of Sunday and Monday will make way for highs today in upper 40°Fs, as a warm front associated with a low pressure

system in the Great Lakes rotates through our region. It will bring with it showers (mostly rain) this afternoon and evening. Following the passage of the associated cold front tonight, Wednesday and Thursday will be slightly colder than normal with blustery winds. The weather will moderate somewhat on Friday before our next chance for precipitation on the weekend. Five days out, there is still uncertainty, but at the moment it looks like a mix of rain and snow.

#### **Extended Forecast**

Today: Mostly cloudy. High 48°F (9°C). West winds at 8-12 mph, shifting to south winds, gusting to 30 mph.

Tonight: Rain and snow showers. Low 32°F (0°C). South winds at 8-12 mph, shifting to west winds, gusting to 25 mph.

Tomorrow: Mostly sunny. High 37°F (3°C). Low 22°F (-6°C). West winds at 15-20 mph, gusting to 30 mph.

Thursday: Partly cloudy. High 35°F (2°C). Low 25°F (-4°C). West winds at 15-20 mph.

30°N 25°N Situation for Noon Eastern Time, Tuesday, February 19, 2013 Weather Fronts Precipitation Symbols  $\overset{*}{\nabla}$ Ÿ Thunderstorn Light \* Compiled by MIT Meteorology Staff Moderate \*\* and The Tech

# As Assad holds firm, Obama could revisit arms policy

By Mark Landler and Michael R. Gordon

THE NEW YORK TIMES

WASHINGTON — When President Barack Obama rebuffed four of his top national security officials who wanted to arm the rebels in Syria last fall, it put an end to a debate of several months over how aggressively Washington should respond to the strife there that has now left nearly 70.000 dead.

But the decision also left the White House with no clear strategy to resolve a crisis that has bedeviled it since a popular uprising erupted against President Bashar Assad almost two years ago. Despite an American program of nonlethal assistance to the opponents of the Syrian government and \$365 million in humanitarian aid, Obama appears to be running out of ways to speed Assad's exit.

With conditions continuing to deteriorate, officials said, the president could reopen the debate over providing weapons to select members of the resistance in an effort to break the impasse in Syria. The question is whether a wary Obama, surrounded by a new national security team, would come to a different conclusion.

"This is not a closed decision," a senior administration official said. "As the situation evolves, as our confidence increases, we might revisit it."

Obama's decision not to provide arms when the proposal was broached before the November election, officials said, was driven by his reluctance to get drawn into a proxy war and by his fear that the weapons would end up in unreliable hands, where they could be used against civilians or Israeli and American interests.

As the United States struggles to formulate a policy, however, Assad has given no sign that he is ready to yield power, and the Syrian resistance has been adamant that it will not negotiate a transition in which he has a role.

Even if Assad was overthrown, the convulsion could fragment Syria along sectarian and ethnic lines, each supported by competing outside powers, said Paul Salem, who runs the Middle East office of the Carnegie Endowment for International Peace. "Syria," he said, "is in the process, not of transitioning, but disintegrating."

On Monday, European Union foreign ministers decided against easing an arms moratorium despite objections by Britain. In what appeared to be a compromise, the ministers agreed to "provide greater nonlethal support and technical assistance for the protection of civilians," according to the EU's website.

As the Syria conflict has unfolded, the State Department has funneled \$50 million of nonlethal assistance to the Syrian opposition, including satellite telephones, radios, broadcasting equipment, computers, survival equipment and related training. This support, officials say, has helped Syrians opposed to the Assad government communicate with one another and with the outside world, despite efforts by Syrian forces to target rebel communications using equipment supplied by Iran. An FM radio network is to connect broadcasting operations in several Syrian cities in the next several days. The State Department has also helped train local councils in areas freed from the Syrian government's control.

# Obama plan sets up long wait for citizenship for illegal immigrants

By Michael D. Shear and Julia Preston

THE NEW YORK TIMES

WASHINGTON — A plan by President Barack Obama for an overhaul of the immigration system would put illegal immigrants on a path to citizenship that could begin after about eight years and would require them to go to the back of the line behind legal applicants, according to a draft of the legislation that the White House has circulated within the administration.

The draft plan says none of the 11 million illegal immigrants currently in the country would be granted permanent resident status and given a document known as a green card until the earlier of two dates: either eight years after the bill is enacted or 30 days after visas have been given to everyone who applied legally.

The plan includes a shortened path to citizenship for young illegal immigrants who came to the United States as children, said an administration official who agreed to discuss the details only on the condition of anonymity. In many cases, those young people could apply for green cards as soon as two years after the law was passed.

The disclosure of the document's existence, by USA Today on Saturday, set off a series of political recriminations and questions on Sunday about Obama's promise to allow bipartisan congressional talks to take precedence. The furor also offered new evidence that Republicans could use the president's direct involvement as a reason to reject a potential compromise.

The White House on Wednesday sent copies of the draft to officials in government agencies that deal with immigration and border security, the administration official said. In the face of the sharp Republican criticism of Obama's plan, the White House insisted over the weekend that no decision had been made and that nothing had changed. Officials reasserted their support for

the delicate negotiations on Capitol Hill. White House aides reached out to lawmakers in both parties on Saturday night to reassure them, officials said.

Denis McDonough, the president's top White House aide, said on Sunday that Obama remained committed to staying on the sidelines while a group of Republican and Democratic senators tries to reach an immigration agreement by the spring.

In his first appearances on Sunday talk shows as chief of staff, Mc-Donough said the administration was preparing draft legislation only as a backup.

"We've not proposed anything to Capitol Hill yet," he said on the ABC program "This Week." "We're going to be ready. We have developed each of these proposals so we have them in a position so that we can succeed."

Sen. Marco Rubio, R-Fla., issued a statement late Saturday calling the president's reported legislation "half-baked and seriously flawed."

# Violent television affects children's behavior, study says

By Catherine Saint Louis

THE NEW YORK TIMES

Experts have long known that children imitate many of the deeds — good and bad — that they see on television. But it has rarely been shown that changing a young child's viewing habits at home can lead to improved behavior.

In a study published Monday in the journal Pediatrics, researchers reported the results of a program designed to limit the exposure of preschool children to violence-laden videos and television shows and increase their time with educational programming that encourages empathy. They found that the experiment reduced the children's aggression toward others, compared with a group of children who were allowed to watch whatever they wanted.

"Here we have an experiment that proposes a potential solution," said Dr. Thomas N. Robinson, a professor of pediatrics at Stanford, who was not involved in the study. "Giving this intervention — exposing kids to less adult television, less aggression on television and more prosocial television — will have an effect on behavior."

While the research showed "a small to moderate effect" on the preschoolers' behavior, he added, the broader public health impact could be "very meaningful."

The new study was a randomized trial, rare in research. The researchers, at Seattle Children's Research Institute and the University of Washington, divided 565 parents of children ages 3 to 5 into two groups. Both were told to track their children's media consumption in a diary that the researchers assessed for violent, didactic and prosocial content.

The control group was given advice only on better dietary habits for children. The second group of parents was sent program guides highlighting positive shows for young

children and received newsletters encouraging them to watch television with their children and ask questions during the shows about the best ways to deal with conflict.

After six months, parents in the group receiving advice about television-watching said their children were somewhat less aggressive with others, compared with those in the control group. The children who watched less-violent shows also scored higher on measures of social competence, a difference that persisted after one year.

Low-income boys showed the most improvement, though the researchers could not say why. Total viewing time did not differ between the two groups.

"The take-home message for parents is, it's not just about turning off the TV; it's about changing the channel," said Dr. Dimitri A. Christakis, the lead author of the study and a professor of pediatrics at the University of Washington.

# White House concerned about delay in security confirmations

President Barack Obama's chief of staff said Sunday that the White House had "grave concern" that national security was at risk, given the Senate Republicans' delaying tactics in confirming both a new Pentagon chief and a director of the Central Intelligence Agency.

The chief of staff, Denis McDonough, made the comment on the ABC News program "This Week," one of several Sunday shows where he made debut appearances as the top White House adviser. He was reacting to the likelihood that neither former Sen. Chuck Hagel, Obama's nominee to be defense secretary, nor John O. Brennan, the president's choice for the CIA, would get a Senate vote until late this month at the earliest.

Senate Republicans blocked Hagel's confirmation on Thursday with the first-ever filibuster against a defense secretary nominee, citing his views on Israel, Iran and Iraq, and his general unpopularity among some of them.

—Jackie Calmes, The New York Times

## Project seeks to build map of human brain

The Obama administration is planning a decade-long scientific effort to examine the workings of the human brain and build a comprehensive map of its activity, seeking to do for the brain what the Human Genome Project did for genetics.

The project, which the administration has been looking to unveil as early as March, will include federal agencies, private foundations and teams of neuroscientists and nanoscientists in a concerted effort to advance the knowledge of the brain's billions of neurons and gain greater insights into perception, actions and, ultimately, consciousness.

Scientists with the highest hopes for the project also see it as a way to develop the technology essential to understanding diseases like Alzheimer's and Parkinson's, as well as to find new therapies for a variety of mental illnesses.

The project, which could ultimately cost billions of dollars, is expected to be part of the president's budget proposal next month.

—John Markoff, The New York Times

# Marines look to arduous infantry course for insight on women

In the fall, two freshly minted female lieutenants joined about 100 men in Quantico, Va., for one of the most grueling experiences soldiers not in war can experience: the Marine Corps' Infantry Officer Course.

At the 86-day course, candidates haul heavy packs and heavier weapons up and down steep hills, execute ambushes and endure bitter cold, hunger and exhaustion.

One of the women — the first to enter the course — was dropped on the first day, with about two dozen men, during a notoriously strenuous endurance test. But the second woman lasted deep into the second week, when a stress fracture in her leg forced her to quit.

"She was tough," Gen. James F. Amos, the Marine Corps commandant, said of the woman, who is now at flight school. "She wasn't going to quit."

Amos hopes the experiences of those women, and others to come, will provide crucial clues about the future of women in the infantry, a possibility allowed by the recent lifting of the 1994 ban on women in direct combat units.

For the Marine Corps, probably more than any other military service, gender integration is a difficult affair. Not only is the corps the most male of the services, with women making up only about 7 percent of its ranks, but it is also a bastion of the infantry.

—James Dao, The New York Times

# Netanyahu defends Israel's handling of prisoner X case

JERUSALEM — Prime Minister Benjamin Netanyahu on Sunday defended his government's handling of an Australian-Israeli who was held under a pseudonym for months in a maximum-security prison until he committed suicide in 2010, suggesting that the threats his country faces justify the extraordinary measures and the secrecy shrouding the case.

"We are not like other countries," Netanyahu told his Cabinet, in his first public comments on the case of Prisoner X, which made headlines on at least three continents last week. "We are an exemplary democracy and maintain the rights of those under investigation," he said. "However, we are more threatened and face more challenges; therefore, we must maintain proper activity of our security agencies."

—Jodi Rudoren, The New York Times

#### Lawmaker's body is found near Moscow in cement-filled barrel

MOSCOW — The body of a missing city legislator and construction tycoon has been found in a private basement garage on the city's outskirts, inside a rusted metal barrel filled with cement, the police said Monday.

Russian television showed investigators removing the body of the man, Mikhail Pakhomov, 36, on Sunday evening from the garage, 20 miles east of Moscow, where the police said he had been tortured and killed over an outstanding \$80 million loan.

The killing recalled the brutal violence that routinely emerged from business disputes in the 1990s. Pakhomov, who was reported missing last Tuesday, was a promising young star in United Russia, the ruling party founded by President Vladimir V. Putin, and had served as head of a construction company that was reported to have won large contracts to develop utilities and infrastructure in several cities.

—Andrew Roth, The New York Times



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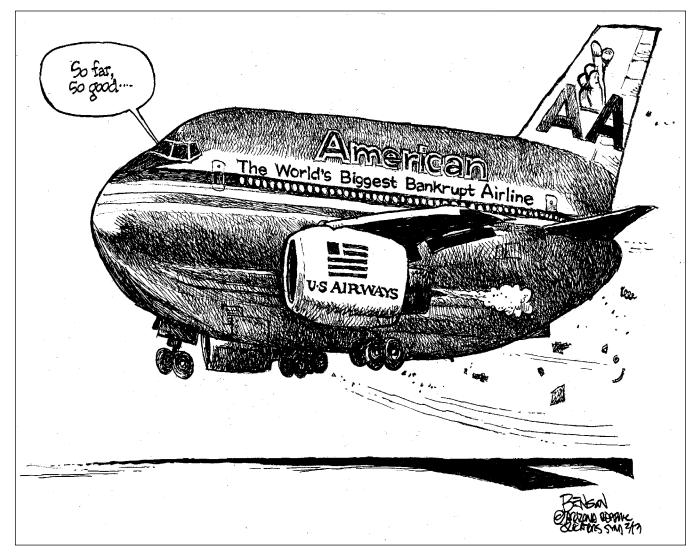
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#### THE NUMBER OF UNEMPLOYED AMERICANS TICKS UP BY ONE

**CORRECTIONS** 

A story in Friday's issue on the CPW event cap mistakenly indicated that DormCon lowered the cap, when in fact it was the Admissions Office. The same article named Kelly E. Snyder '14 CPW Chair of East Campus; she actually the president of EC.

#### **OPINION POLICY**

**Editorials** are the official opinion of *The Tech*. They are written by the Editorial Board, which consists of Chairman Sarah Ritter, Editor in Chief Anne Cai, Managing Editor Ian M. Gorodisher, Executive Editor Deborah Chen, and Opinion Editor Jacob London.

**Dissents** are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, columns, and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to *letters@tech.mit.edu*. Hard copy submissions should be addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. *The Tech* reserves the right to edit or

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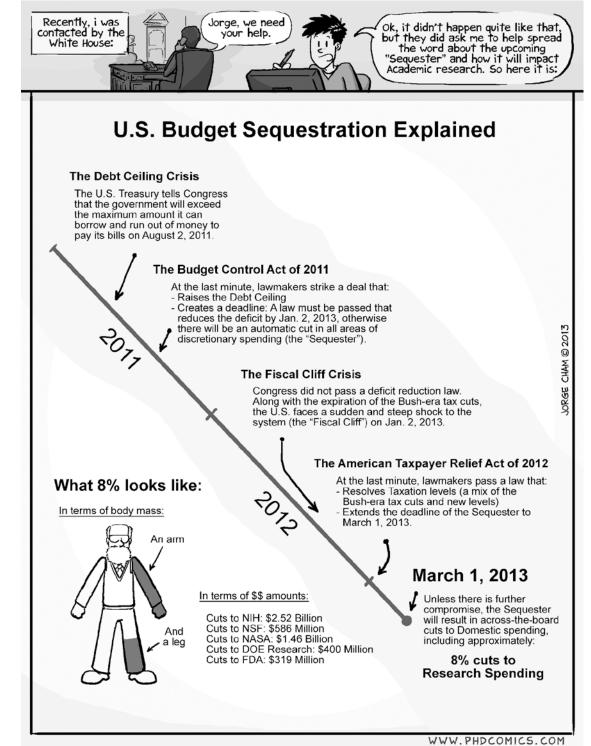
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#### **TO REACH US**

The Tech's telephone number is (617) 253-1541. Email is the easiest way to reach any member of our staff. If you are unsure whom to contact, send mail to <code>general@tech.mit.edu</code>, and it will be directed to the appropriate person. You can reach the editor in chief by emailing <code>eic@tech.mit.edu</code>. Please send press releases, requests for coverage, and information about errors that call for correction to <code>news@tech.mit.edu</code>. Letters to the editor should be sent to <code>letters@tech.mit.edu</code>. The Tech can be found on the World Wide Web at <code>http://tech.mit.edu</code>.

Tuesday, February 19, 2013 THE TECH 5







by Jorge Cham

## Saturday Stumper by Anna Stiga

Solution, page 12

#### **ACROSS**

- 8 Mobile home
- 15 Duties, customs, etc. 16 Car collector
- 17 Far-out locale
- 18 Camaraderie
- 19 Word as rhymeless as
- "pint" 20 See to it
- 21 Refinement candidate
- 22 World Team Chess
- powerhouse 25 QM2 destination
- 26 Bus patron
- 28 String
- 29 Sales bread-and-butter
- 30 Tip or top
- 31 Volvo purchase of 2000
- 34 Tip or top
- 35 Like
- 36 Video player pause control, often
- 44 Self-taught group
- 43 Name on the street
- 48 Part of Bill Gates' full name 49 Whopper

- 50 Great deal
- About to fail, perhaps
- 53 Strike out
- 55 Discipline
- 56 Live it up
- 58 One from Rhodes
- 59 Punchy?
- 60 Makes known 61 Formal compensation

#### **DOWN**

- 1 Trailers and fliers
- 2 Make known
- 3 Plane, for example
- 4 Hollow spot 5 Fit
- 6 Aural guide 7 Leaves in the pantry
- 8 See to

- 9 Dripping more 10 Pops up
- 11 Hard knocks 12 Came (to)
- 13 Causing audience tears, quite possibly
- 14 Forerun
- 20 Fix
- 23 Frat letter 27 Moses' river basket, per 31 Strolling band specialty 32 Tevye the Milkman author 33 Stretchy part of Pirelli's logo 36 Move slowly 38 Gets in sync 39 IPO funding recipient academic addresses 41 Started on

Exodus

34 Age

37 Biting

40 Part of

dinner

45 Legal article

47 "Gallop apace, you fiery-

footed \_\_": Shak.

46 Gets rid of

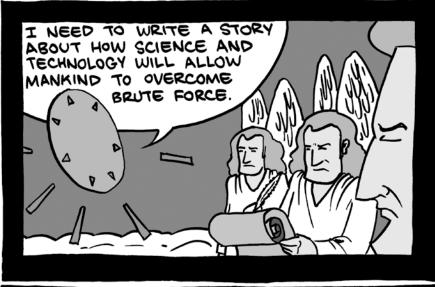
42 Stuck

- 16 18 19 20 21 22 23 24 26 28 27 29 30 31 |32 |33 34 35 38 39 40 41 43 44 45 | 46 | 47 48 49 50 51 52 53 54 55 56 |57 58 59 60 61
  - 52 Dot of tierra 54 Show approval, or
    - disapproval
- 56 "What is \_\_" (section of heart.org) 57 "Craft" product

11 12 13 14

JNFUNFUNFUNFUNFU









#### [1174] App



If I click 'no', I've probably given up on everything, so don't bother taking me to the page I was trying to go to. Just drop me on the homepage. Thanks.

#### Sudoku

Solution, page 12

7		9	6					
3				1	9	7	5	
								3
	5		9		6			
6		4	8		2	5		9
			3		1		8	
4								
	7	3	1	9				8
					3	4		5

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

#### **Techdoku**

Solution, page 12

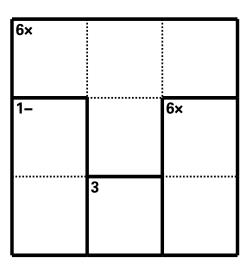
144×		10+	15×		
	2		1–	<u> </u>	3
	5×		<del> </del>	384×	
30×	3	<b>-</b>	6	<b></b>	
	240×	<u> </u>	<u> </u>		6
			3×		5
		į		<u> </u>	

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

# Triplet Techdokus

Solution, page 12

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–3. Follow the mathematical operations for each box.



6×		6×
3×		
	2×	

7+		3×
4+		
	2×	

Tuesday, February 19, 2013 THE TECH 7

# Class of 2015 comes together for Ring Premiere

#### Sophomores cheer on Ringcomm classmates, discover features on this year's Brass Rat

Premiere, from Page 1

Vice Chair Michelle H. Lee '15 tried to start the ceremony, each could barely get a sentence out without the crowd interrupting. Michelle's voice rose to a shout over the raving audience. "This is going to take a really long time," said Abel into

rean next to the Hancock tower a reference to the fact that part of Back to the Future II took place in 2015. There was also the usual two sets of crew shells, this year with one and five rowers in the boats, and a sailboat whose sail read "15." Fenway also made an appearance,

#### The presentation of the ring began with the Hacker's Map, which is — for the first time — cast into the ring, meaning it won't wear down with years of use.

the microphone as the Chi Phis shouted "Abel!", "Queeney!", and even "Kalas!" as Jeremy J. Kalas '16 took down names of the giveaway winners in the corner.

When Michael O. Flynn '15 took to the podium, he asked: "Where has the rum gone?" The answer, it would seem, was that it was consumed by the audience.

The presentation of the ring began with the Hacker's Map, which is — for the first time — cast into the ring, meaning it won't wear down with years of use. It was subtle on the inside of the ring; I could barely feel the narrow, cast tunnels on my finger when I tried on a ring later.

Next was the Boston side of the ring. The outline was of Boston at night, and featured a flying Delocommemorating its 100th anniver-

sary celebrated in 2012.

Next was the Cambridge side oh boy. Simmons was the only dorm shown from West Campus, which caused guite a stir in the audience. People began to either cheer, or boo and shout "Baker!", "Bexley!", and even "Building 36!" (the last one coming from the Bexley contingent). "We wanted to show the scope of the campus, from Simmons all the way to East Campus," Chair Matt Abel would later say. Or as former Simmons resident and Ringcomm member John K. "Jack" Queeney put it: "because Simmons is the cultural center of campus." There was a shooting star as a symbol of "hope and ... Stellar crashing," and the entire horizon was underscored by a double pendulum with Golden

proportions.

This entire time, the Sigma Kappa/Alpha Phi section would continued to stand up with shouts of "Meghan!" and "We love Colleen!", independent of who was on stage. When Alpha Phi Meghan E. Torrence '15 took the stage, I could hardly hear a complete sentence she said over the cheering.

On the shanks, on the Lobby 10 side, the dome reads "M MXV" as hackers escape off Building 10 holding the missing numerals. On the seal side, the Curiosity rover is seen on the edge of the seal itself.

Next came the fun part - the joke bezel. After the committee was introduced, Kira S. Kopacz '15 and Queeney began to present the fake bezel as if it were real. A beaver wearing a "YOLO" shirt sat upon scaffolding, holding a dumbbell and a bowl of Sonoma greens to represent MIT's "health-conscious" student body, while the B1W ambulance sped across the Harvard Bridge, representing our "work hard, play hard" attitude. Some people seemed to believe this was the actual ring. "What is this ugly shit?" said one audience member incredulously.

"Ring delivery is close to home this year," they said next, "at the Johnson Track!" A picture of Johnson track set up for finals flashed onto the screen. "No fucking way," said someone close to me, their jaw practically dropping as others in the crowd looked similarly worried.

There was a moment of silence as Ringcomm said good night, until Abel and Lee returned to the podium. "That bezel sucked almost as much as the '14's" said Abel, getting an explosive response from the audience that came back to life, and boos from the Class of 2014 Ringcomm on the balcony.

swimming in the corner (the Class of 2015 is the 148th graduating class). Of all the features, I hope this one continues so that the Class of 2018 can have a Mew flying around. The Beaver itself faced Boston but gazed back at Cambridge, and swatted away eight ivy leaves. The veins on each leaf spelled out the first letter of each Ivy League school's name, and the Harvard is seen sinking into the river, having been swat-

#### One of the more popular appearances was that of Dragonair, the 148th Pokémon, swimming in the corner (the Class of 2015 is the 148th graduating class).

The real bezel was, as usual, full of small, special features. The Green Building was lit up as if in a Tetris game, adorned with a basketball to represent the MIT men's basketball team's ascent to the Final Four. A lightning bolt in the back hearkened back to our class's Harry Potter-themed orientation, though it was also in the shape of a molecule in a chair conformation to commemorate the International Year of Chemistry in 2011.

One of the more popular appearances, getting a strongly positive audience reaction, was that of Dragonair, the 148th Pokémon, ted by the beaver's tail.

Next came the actual Ring Delivery location — Fenway Park. I have to say that I was surprised, but the audience seemed to love it, and it was a great note to end the night on. After the ceremony, the audience descended upon Kresge Lobby in droves, forming mobs in front of the tables of goodie bags and ring

Overall, the '15s seemed excited about the ring and ring delivery, but I think Abraham I. Garza '15 summed up the thoughts of many: "First I have to get through the



The 2015 beaver sits on a self-made dam, while swatting eight ivy leaves. He is oriented towards Boston but looks back towards Cambridge. Our beaver holds the world and a Mobius Strip. The bezel's backdrop features Boston and Cambridge connected by the Mass. Ave. Bridge, with "IHTFP" engraved in the waves. An astronaut footprint is imprinted into the Esplanade in memoriam of Neil Armstrong. The lightning bolt, reminiscent of our Harry Potter-themed orientation, is the shape of an organic chair confirmation for the International Year of Chemistry. The Maseeh clock tower is set to 9:26 p.m., when many heard of their admission on pi day, and a tree in front of Killian Court is blown over by Hurricanes Irene and Sandy. A basketball on top of the Green Building memorializes Men's Basketball advancing to the Final Four, and the windows are illuminated like the Tetris hack. We gave our beaver a companion in Dragonair, the 148th Pokémon, as we are the 148th graduating class.

Make your own 2015 rat! CUT ON THE DOTTED LINES, FOLD ON THE SOLID LINES



Boston also appears as it would at night. Marked silhouettes include the Hancock Tower, Prudential Center, Back Bay Brownstones, and Citgo Sign. Fenway, the location of the Class of 2015 Ring Delivery, makes another appearance having just celebrated its 100th anniversary. The DeLorean is a reference to Back to the Future, set in 2015. The rowers in the two racing shells form a "15," as do the sails of the two dinghies.

2015 is emblazoned over the Great Dome. The MCMXVI on the face of the dome, representing the year MIT relocated to Cambridge from Boston, has been robbed of its C and I by hackers, leaving our class year "MMXV." President Reif climbs up the stairs, and former President Hockfield walks down to symbolize the transition during our freshman year. The Greek goddess Athena, the namesake of our operating system stands strong in Killian Court. She displays the right-hand rule as she clasps the spear adorned with a DNA strand commemorating the 25th anniversary of the Human Genome Project in 2015. The shield reads "2015" in binary and features the CERN logo for the detection of the Higgs boson. The nuts and bolts insignia completes the class shank. The central screw of the "T" is also tightened to read "x" for the MITx initiative.

INFOGRAPHIC BY

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TUESDAY, FEBRUARY 19, 2013



The joke bezel is presented before the real design of the ring. In front of the B1W ambulance crossing the bridge, the beaver is wearing a "YOLO" shirt and holding a Sonoma greens salad.

# CLASS OF 2015 RING REMIERE



A group of Sigma Kappa members hold up signs with the faces of the two Sigma Kappa members of Ring Committee: Coleen K. Gabel '15 and Michelle H. Lee '15.



A sophomore looks at the sample rings on display in Kresge lobby after the design was unveiled.



Audrey A. Sedal '15 jumps for joy after winning a free brass rat for being the 15th person in line.



**Students excitedly welcome** the members of the 2015 Ring Committee to the stage.



A line of sophomores waiting to enter Ring Premiere stretches across the front of the Zesiger Center.

BRUNO B. F. FAVIERO—THE TECH

# **Becoming a mentor**

Lessons learned from a pro

By Emily A. Moberg

"True education does not consist merely in the acquiring of a few facts of science, history, literature, or art, but in the development of character."

—David O. McKay As graduate students, we have been molded by our teachers and our mentors over the past decade of education and are currently (and hopefully!) engaged in one of the most intense mentorship experiences of our lives. We are essentially apprenticed with a researcher and learn all the skills - asking good questions, figuring out how to answer them, troubleshooting equipment failures, writing well, reviewing well, teaching, etc. - that are important in academia. While we are and have been on the mentee side, we are also in training to become mentors ourselves. Sometimes we get a flavor of this through teaching assistantships or working with undergraduates in the laboratory, but I hope that we can embrace learning to mentor as a critical part of our education. We are training to inspire, develop, and mold the students of the future, just as our mentors inspired and helped us along the way.

One of my high school mentors recently passed away, which made me think about

how he embodied mentorship as a lifestyle and exemplified many of the qualities that great teachers possess. I want to share some of the lessons I learned from my high school physics teacher, Mr. Malkovsky.

# As a some-day academic, I have a huge amount of work to do to be the kind of mentor that changes lives.

1) It's more of a lifestyle than an activity.

Mr. Mal was always there for his students, after school and before school. He didn't wait for us to come to him; he volunteered his time and energy when it looked like we needed help. He ran our physics Olympics and Science Olympiad teams, which meant he was always in his room surrounded by students building things, doing calculations, or organizing events. He was there to talk to if you wanted advice about careers or managing stress. He let us call him — at any time — about physics problems. I remember call-

ing from physics study group late one night after we'd been jumping off chairs, trying to understand how the momentum could be transferred in a collision; Mr. Mal answered cheerfully and helped us get through the problem.

2) Recognize good work but also equip your students to achieve that good work.

Mr. Mal always recognized good work and motivated us to actually learn and understand the material. After I graduated, he personally purchased plaques for the hallway outside his room to acknowledge students who had taken the AP exam. In the classroom, he made tests and problem sets really hard, but if you did poorly and then went through and re-did the exam correctly, he would give you half the points you had lost back. He really made the emphasis on learning and understanding. He never shied away from making us actually derive equations and never made things easier for us. He set the bar high and believed we could get there. However, he didn't just leave us hanging. When we worked in his room, trying to design a good experiment, he'd walk through the problem with us and ask probing questions to help us get there ourselves.

3) Outside stresses can make or break you.

He understood this and provided support for us just as much in academics as in personal support. I remember one time I was determined to stay in class — despite being obviously ill — so I could take my AP physics exam, so Mr. Mal walked me to the guidance office and told them to take care of rescheduling my exam and under no circumstances to let me take it that day. I wasn't able to make that call myself, but it was definitely the best move. He always challenged me to make choices that made me happy, even if they were hard and scary — like applying to MIT. The first time I came back to visit and Mr. Mal said "you look really happy," I realized how far I had come and how much he had helped me to get there.

I know that I, as a some-day academic, have a huge amount of work to do to be the kind of mentor that changes lives like Mr. Mal did. In 63 years, he inspired so many students to believe that they could tackle problems we didn't at first believe we could and pursue fields like engineering and math. We've ended up at places like MIT, Yale, Princeton, UVA, Virginia Tech, RPI, UPenn, and many more. Thank you, Mr. Mal, for showing me how to make the most out of life, pushing me to help others do the same, and teaching me how to be a true mentor.

#### **CULTURE ON CAMPUS**

## A Lunar New Year celebration

Bringing East Asian tradition to Ashdown

By Yi Xue

Lunar New Year celebrations generally evoke images of fireworks, mountains of delicious food, and a table surrounded by family. In most East Asian countries, Lunar New Year is the largest and most important holiday of the year. Unfortunately, on Lunar New Year's Eve this year, Cambridge was engulfed by the snowstorm Nemo, and students were trapped within the confines of their residences. Yet on this dreary February 9th evening, Ashdown House was hosting a Lunar New Year celebration, co-sponsored by ARCADE (Assisting Recurring Cultural And Diversity Events).

Free food is always attractive, not to mention in the middle of such a monstrous snowstorm. Not serving pizza? Even better! Before the scheduled start of the event, serpentine lines had already formed outside of the Hulsizer Room in Ashdown. At 6 p.m. the doors opened, revealing streamers along the ceiling, bright red and gold decorations along the walls, and even some strings of toy fireworks. The sound of cheery New Year's music drifted through the halls.

Close to 250 students crowded into the room with a fervor that was reminiscent of the travel rush to return home during Lunar New Year in China. In front of their eyes lay a feast (by student standards, of course): fried rice, a selection of chicken, pork and vegetable dumplings, and an assortment of side dishes, including steamed buns. Asians and non-Asians alike were delighted and impressed by the quality and quantity of food. "I can't believe a student-organized residence event has vegetarian options!" remarked an excited attendee.

Shockingly, the celebration didn't just end with the food. Along the side of the room were three stations, all showcasing different traditions during Lunar New Year: papercutting, Chinese calligraphy, and dumpling making. Chinese paper cutting, or jianzhi, is the art form of cutting intricate designs of auspicious Chinese characters or zodiac animals from thin paper (generally in red, which symbolizes good fortune). Since paper was invented in China, jianzhi is the first type of papercutting design. Jianzhi are frequently adorned along walls, windows or doors for good luck. In addition to jianzhi, idioms and auspicious words written in calligraphy on red paper also decorate the walls of homes during New Year's. One student masterfully painted out an idiom in Chinese Calligraphy "Tian Dao Chou Qin," meaning "Heaven rewards the diligent."

In China, the entire extended family gathers together and makes dumplings at this time of the year. In this event, attendees were able to try their hand at making pork or vegetable dumplings and bring them home to cook later. Additional fun came in the raffle for red envelopes, which is a customary gift from elders in the family to younger generations on occasions such as New Year's (Amazon gift cards were substituted for money).

There couldn't have been a more joyous and festive atmosphere on campus during the remnants of a snowstorm. Many East Asian international students were excited to participate in activities they never imagined they would have outside of their countries. The event evoked memories of home and furthermore, it allowed them to share the experience of Lunar New Year with their peers.



**Students participate in different Lunar New Year traditions:** making dumplings, writing calligraphy, and papercutting.

YI XUE



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#### EVENTS FEB. 19 – FEB. 25

#### **TUESDAY**

(3:30 p.m. – 5:00 p.m.) Contrasting Secular & Religious Agenda Terror and Guerrilla Warfare: From Che Guevara to Osama bin Laden — E40-496

(5:00 p.m. – 7:00 p.m.) Convergence Journalism? Emerging Documentary and Multimedia forms of News panel — E14-633

#### WEDNESDAY

(5:00 p.m. – 6:30 p.m.) Kevin Jerome Everson: "Recent Practice" multimedia presentation — 5-135

(8:00 p.m. – 10:00 p.m.) FILM +

improvisation=FiLmprov!, live improvisational music — 14W-111

#### THURSDAY

(5:30 p.m. – 6:30 p.m.) Steve Pinker: The Evolutionary Psychology of Religion lecture series — 32-155

(7:00 p.m. – 9:00 p.m.) Urban Films: Street Fight — 66-110

#### **FRIDAY**

(10:30 a.m. – 11:30 a.m.) Using big data to discover tacit knowledge and improve learning DUE Education talk — 3-270

(8:00 p.m. – 10:00 p.m.) An Evening with Jim Gaffigan — W16

#### **SATURDAY**

(7:00 p.m. – 9:00 p.m.) Mocha Showcase 2013 — Kresge Little

(8:00 p.m.) Queen Esther's Ball — Walker Memorial Morss Hall

#### **MONDAY**

(4:00 p.m. – 5:30 p.m.) Simulating adulthood: Junior republics and the invention of modern youth — E51-095

(5:00 p.m. – 6:30 p.m.) India's Urban Transformation: The Full Story — E40-496

Send your campus events to events@ tech.mit.edu.

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#### Schedule of Events

Monday, February 11

7:30 PM

32-144

ID Hack Info Session & Workshop

Featuring Microsoft representatives and free Windows 8, Visual Studio Software Access, & dinner sponsored by Microsoft

Tuesday, February 19

7:30 PM 4-145

Microfinance to Macrosolutions

Featuring speaker Miguel Herrera, the principal director of Accion Frontier Investing Group. Dinner provided.

Wednesday, February 20

7:30 PM

McCormick Brown Living Room

**Policy Makers with a Purpose** 

Roundtable discussion with professors from MIT & Harvard. Registration required, Hors'deouvres served.

Thursday, February 21

7:30 PM 4-163

**Improving World Health** 

Featuring a panel of speakers from Vecna Technologies & Partners in Health. Dinner Provided.

Friday, February 22

6:00 PM

Microsoft NERD Ctr.

**ID Hack 2013** 

Ends 10 PM, February 23. International development hackathon featuring over \$1400 in prizes.



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TUESDAY, FEBRUARY 19, 2013

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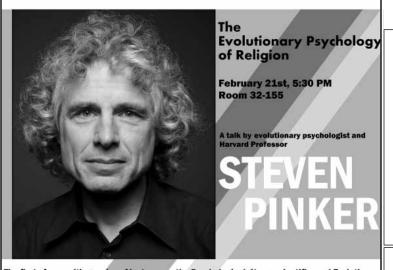
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Purposes and designs: Foundations of adult religious belief in childhood
If religious belief was evolutionarily adaptive, why do nonbelievers exist?
Neuroimaging of religious experience
Sacrificing Freedom of Mind: How We Fall Prey to Cults and Controllers

# Charges proposed for Syria

#### UN panel urges prosecution for Syrian war crimes

By Nick Cumming-Bruce

GENEVA — The U.N. Security Council should refer Syria to the International Criminal Court in The Hague to prosecute those responsible for war crimes and other abuses committed in nearly two years of conflict, Carla del Ponte, a U.N. human rights investigator, said Monday.

"Now, really, it's time — it's time," del Ponte said. "We are pressuring the international community to act because it's time to act."

Del Ponte was speaking as the U.N. Human Rights Council commission investigating Syria, of which she is a member, reported that violence in Syria was worsening, "aggravated by increasing sectarianism" and radicalized by the increasing presence of foreign fighters. It said the conflict was also "becoming more militarized because of the proliferation of weapons and types of weapons used."

The panel's 131-page report detailing evidence of war crimes and other abuses in the six months up to mid-January said, "The issue of accountability for those responsible for international crimes deserves to be raised in a more robust manner to counter the pervasive sense of impunity in the country."

The top U.N. human rights official, Navi Pillay, has also urged that Syria be referred to the International Criminal Court. Authority to make such a referral, however, lies exclusively with the Security Council or the country concerned.

"It's incredible the Security Council doesn't take a decision," said del Ponte, who had been the chief prosecutor for international tribunals on the former Yugoslavia and Rwanda. A referral must be made urgently, she said, "because crimes are continuing, and the number of victims is increasing day to day. Justice must be done."

The report released Monday is to be discussed in the Human Rights Council in March, when member nations appear likely to extend the commission's mandate. Diplomats in Geneva point out that the panel is the only U.N.-mandated machinery shedding a spotlight on abuses, and that its reports provide the most comprehensive and factual account of how Syria's conflict is being waged.

In their latest report, based on 445 interviews, the investigators said they had found credible evidence of war crimes and crimes against humanity committed by both government and opposition forces in the six months to mid-January. The report cited accounts of massacres, summary executions, torture, attacks on civilians, sexual violence and abuses against children.

Pro-government forces committed massacres in August in Daraya, where more than 100 people, including women and children, reportedly died, and in Harak in the Daraa governorate, where witnesses said more than 500 civilians had been killed.

Government forces involved in Harak included the Syrian army as well as military and political intelligence units, the report said, noting that they may have been accompanied by members of Iran's Islamic Revolutionary Guards Corps. The panel said it was still investigating other reports of mass killings.

Drawing on the accounts of defectors and "insiders," the report said government forces had deliberately targeted civilians to punish people in areas seen as supporting the opposition. Neighborhoods in Damascus have been destroyed by government forces, and bread lines in several towns have been targeted when the concentration of civilians would be at their highest.

conflict, by empowering Islamist militant groups such as the Al Nusra Front, "and even encouraged mainstream insurgents to join them owing to their superior logistical and operational capabilities."

The report added that "regional and international actors hampered the prospects of a negotiated settlement owing to their divergent interests. The position of key international actors remains unchanged."

Panel members said Monday that their ability to report on activities of the opposition was seriously hampered by what they called the Assad government's persistent refusal to give its investigators access to Syria.

The panel said last year that it had already accumulated a "formidable and extraordinary body of evidence" against those responsible for war crimes, and it again said that it would provide the U.N. human rights office with the names of leaders who may be responsible for abuses, as well as the individuals and units that carried them out.

Release of the latest report came against a backdrop of what appeared to be part of a new public relations effort by Assad to present

# Authority to make such a referral lies exclusively with the Security Council or the country concerned.

"Indiscriminate and widespread shelling, the regular bombardment of cities, mass killing, indiscriminate firing on civilian targets, firing on civilian gatherings and a protracted campaign of shelling and sniping on civilian areas have characterized the conduct of the government," the panel said.

Investigators also cited "credible admissions against their own interest" by witnesses of the mass killing of five members of one family whose execution was filmed and posted on the Internet. They said a member of the rebel Free Syrian Army had acknowledged that his brigade captured and executed five Alawites, members of the Shiite Muslim minority that provides the bedrock of support for President Bashar Assad.

The panel expressed particular concern over "an increase in acts of unrestrained violence" associated with the proliferation of armed groups that appeared to serve no strategic purpose but to foment sectarian tensions and spread terror among civilians. The report warned that "this trend risks becoming a malignant feature of the conflict."

It also said that foreign intervention had helped radicalize the

himself as an empathetic leader who believes his enemies are losing the war, in interviews that seemed to ignore a string of tactical and logistical setbacks suffered by his side.

Last week insurgents claimed to have captured Syria's largest hydropower dam, important oil fields in the northeast, an airfield full of usable warplanes and troves of other weapons, corroborating their claims with videos posted on the Internet. Syria's state-run news media has said nothing of these claims.

An article published Monday by Al-Quds, a London-based pan-Arab daily newspaper, quoted Assad as telling a recent delegation of Jordanians to Damascus, "Those who oppose Bashar, seek to destroy Syria and talk about me forget an essential truth, which is: I am human, made of blood and flesh, at the end of the day."

In a separate audience with visiting Lebanese politicians, reported by the pro-Assad Lebanese newspaper As-Safir, Assad was quoted as saying, "We are sure we will win, we are reassured by the political and military developments," according to a translation of the article by Agence France-Presse.

## Solution to Triplet Techdoku I from page 6

3	2	1
2	1	3
1	3	2

#### Solution to Sudoku

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5	7	3	1	9	4	2	6	8
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#### Solution to Triplet Techdoku II

	from page 6	
2	1	3
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3	2	1

#### Solution to Techdoku

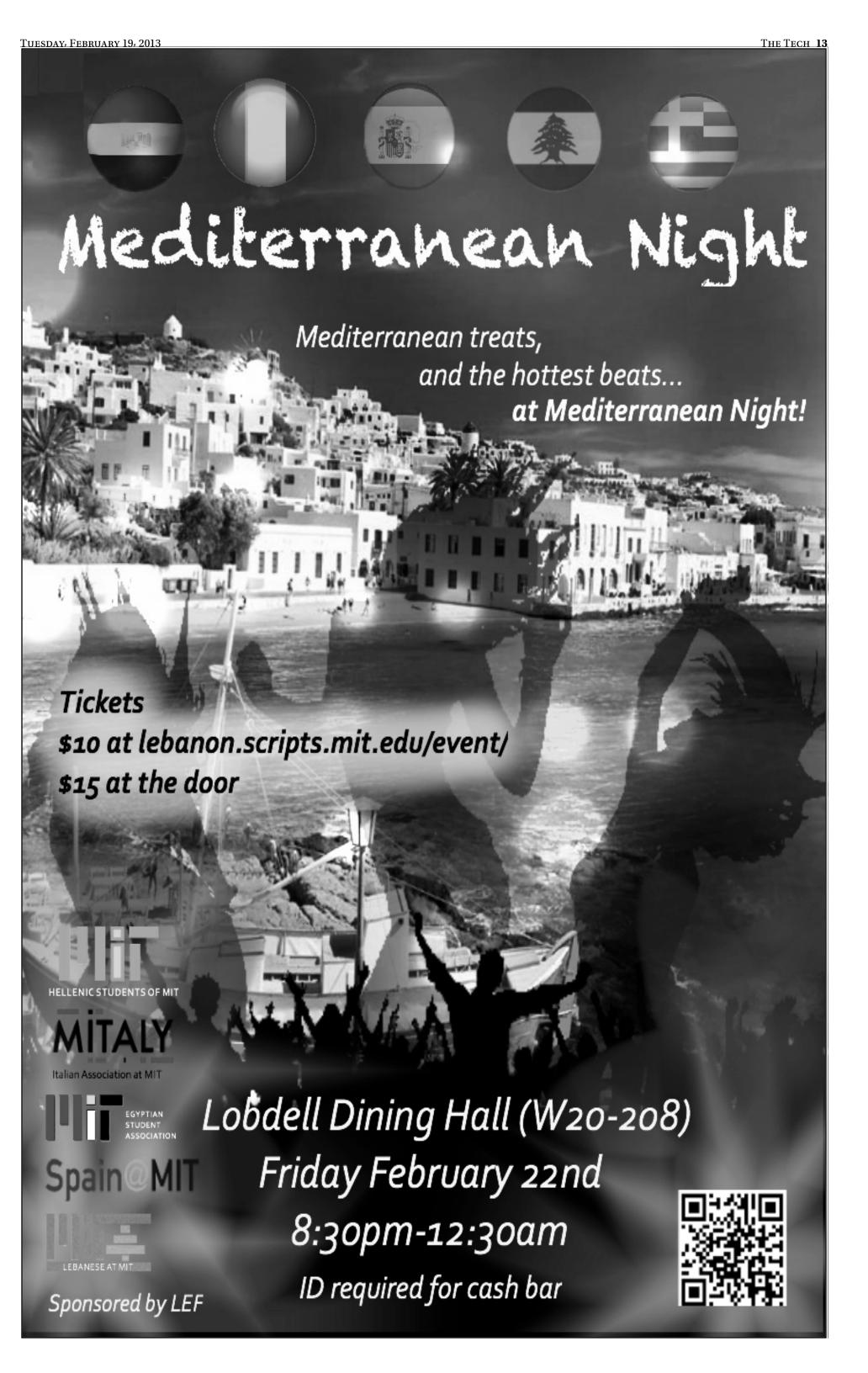
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#### Solution to Triplet Techdoku III

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1	2	3
3	1	2

#### Solution to Crossword from page 5

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# China's army seen as tied to hacking against US Mandiant believes sporadic attacks occurred on US corporate & government computers

By David E. Sanger, David Barboza, and Nicole Perlroth

THE NEW YORK TIMES

On the outskirts of Shanghai, in a run-down neighborhood dominated by a 12-story white office tower, sits a People's Liberation Army base for China's growing corps of cyberwarriors. The building off Datong Road is the headquarters of PLA Unit 61398.

inside Unit 61398," said Kevin Mandia, the founder and chief executive of Mandiant, in an interview last week, "or the people who run the most-controlled, mostmonitored Internet networks in the world are clueless about thousands of people generating attacks from this one neighborhood."

A recent classified National Intelligence Estimate, issued as a consensus document for all 16 of the U.S. intelligence agencies,

#### Chinese officials at its embassy in Washington again insisted Monday that its government does not engage in computer hacking, and that such activity is illegal.

A growing body of digital forensic evidence - confirmed by U.S. intelligence officials who say they have tapped into the activity of the army unit for years — leaves little doubt that an overwhelming percentage of the attacks on U.S. corporations, organizations, and government agencies originate in and around the white tower.

An unusually detailed 60-page study, to be released Tuesday by Mandiant, a U.S. computer security firm, tracks for the first time individual members of the most sophisticated of the Chinese hacking groups - known to many of its victims in the U.S. as "Comment Crew" or "Shanghai Group" — to the doorstep of the military unit's headquarters.

The firm was not able to place the hackers inside the 12-story building, but makes a case there is no other plausible explanation for why so many attacks come out of one comparatively small area.

"Either they are coming from

makes a strong case that many of these hacking groups are either run by PLA officers or are contractors working for commands like Unit 61398, according to officials with knowledge of its classified

Mandiant provided an advance copy of its report to The New York Times, saying it hoped to "bring visibility to the issues addressed in the report." (Mandiant was hired by The New York Times Co. to investigate a sophisticated Chineseorigin attack on the news operations, but concluded it was not the work of Comment Crew, but another Chinese group.)

While Comment Crew has drained terabytes of data from companies like Coca-Cola, increasingly its focus is on companies involved in the critical infrastructure of the United States — its electrical power grid, gas lines, and waterworks. According to the security researchers, one target was a company with remote access to

more than 60 percent of oil and gas pipelines in North America.

The unit was also among those that attacked the computer security firm RSA, whose computer codes protect confidential corporate and government databases.

Contacted Monday, Chinese officials at its embassy in Washington again insisted that its government does not engage in computer hacking, and that such activity is illegal. They describe China itself as a victim of computer hacking, and point out, accurately, that there are many hacking groups inside

But in recent years the Chinese attacks have grown significantly, security researchers say.

Mandiant has detected more than 140 Comment Crew intrusions since 2006. U.S. intelligence agencies and private security firms that track many of the 20 or so other Chinese groups every day say those groups appear to be contractors with links to the unit.

While the unit's existence and operations are considered a Chinese state secret, Rep. Mike Rogers, R-Mich., the chairman of the House Intelligence Committee, said in an interview that the Mandiant report was "completely consistent with the type of activity the Intelligence Committee has been seeing for some time."

The White House said it was "aware" of the Mandiant report, and Tommy Vietor, the spokesman for the National Security Council, said, "We have repeatedly raised our concerns at the highest levels about cybertheft with senior Chinese officials, including in the military, and we will continue to

The U.S. government is plan-

ning to begin a more aggressive defense against Chinese hacking groups, starting on Tuesday. Under a directive signed by President Barack Obama last week, the government plans to share with U.S. Internet providers information it has gathered about the unique digital signatures of the largest of the groups, including Comment Crew and others emanating from near where Unit 61398 is based.

The U.S. finds itself in something of an asymmetrical digital war with China.

"In the Cold War, we were focused every day on the nuclear command centers around Moscow," one senior defense official said recently. "Today, it's fair to say that we worry as much about the computer servers in Shanghai."

While the Obama administration has never publicly discussed the Chinese unit's activities, a secret State Department cable written the day before Barack Obama was elected president in November 2008 described at length U.S. concerns about the group's attacks on government sites.

the desire to follow the unit's activities have kept the government from going public. But Mandiant's report is forcing the issue into public view.

For more than six years, Mandiant tracked the actions of Comment Crew, so named for the attackers' penchant for embedding hidden code or comments into Web pages. Based on the digital crumbs the group left behind — its attackers have been known to use the same malware, Web domains, Internet protocol addresses, hacking tools and techniques across attacks - Mandiant followed 141 attacks by the group, which it called "APT 1" for Advanced Persistent Threat 1.

Mandiant discovered that two sets of IP addresses used in the attacks were registered in the same neighborhood as the Unit 61398's building.

"It's where more than 90 percent of the attacks we followed come from," said Mandia.

Mandiant believes Unit 61398 conducted sporadic attacks on U.S. corporate and government

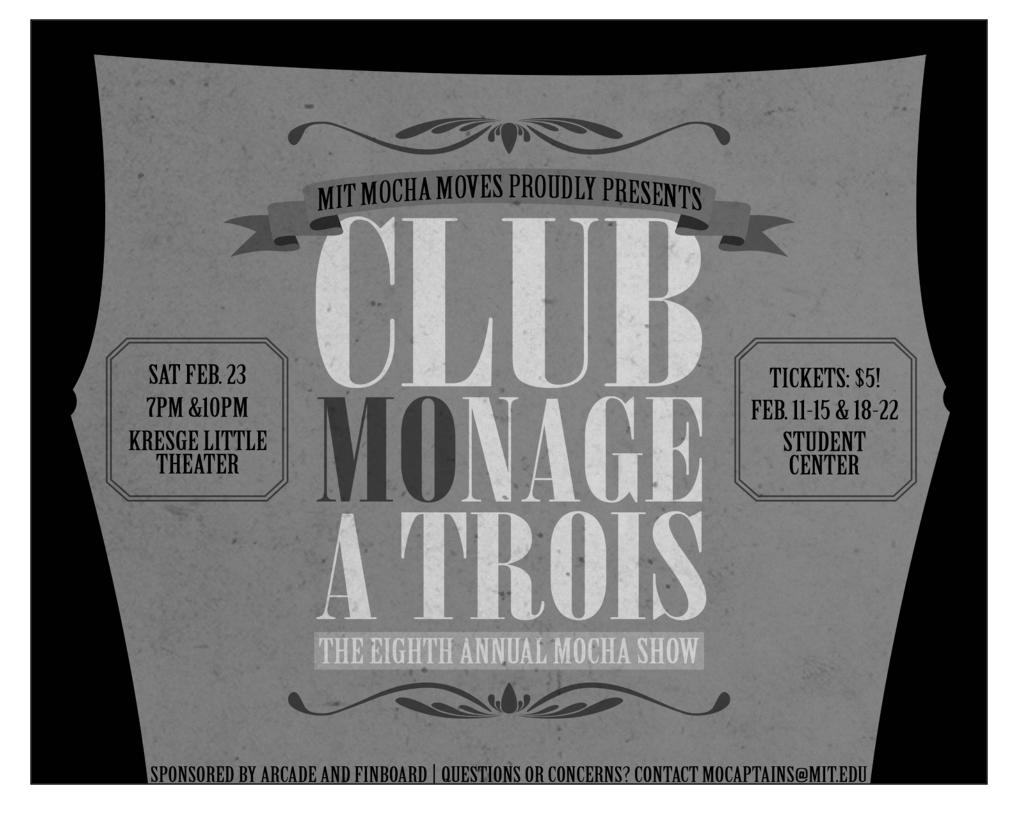
#### The United States government is planning to begin a more aggressive defense against Chinese hacking groups, starting on Tuesday.

The Defense Department and the State Department were particular targets, the cable said, describing how the group's intruders send emails, called "spearphishing" attacks, that placed malware on target computers once the recipient clicked on them. From there, they were inside the systems.

U.S. officials say that a combination of diplomatic concerns and

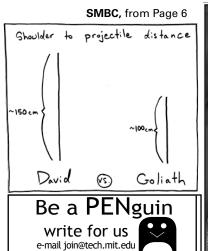
computer networks; the earliest it found was in 2006. Two years ago the numbers spiked.

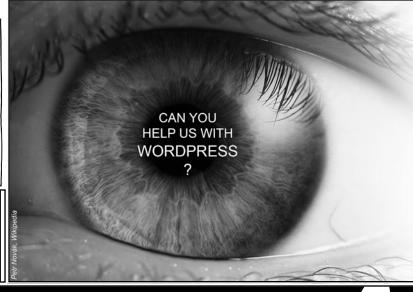
Mandiant has watched the group as it has stolen technology blueprints, manufacturing processes, clinical trial results, pricing documents, negotiation strategies and other proprietary information from more than 100 of its clients, mostly in the U.S.



Tuesday, February 19, 2013

The Tech 15





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Dept. of Brain & Cognitive

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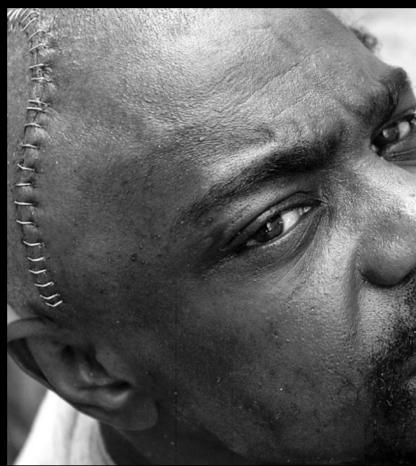
psinha@mit.edu



# IN THE LAST 8 YEARS, OVER 500 HONELESS MEN, WOMEN AND CHILDREN HAVE BEEN ATTACKED. 183 HAVE DIED.







Ricky White, 45, Galveston, TX

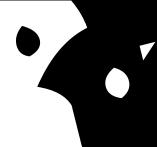
- Victims range from 4 months to 84 years old.
- 58% of the perpetrators were ages 13–19.

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# Engineers take 6 events out of 7

MIT men's swimming team builds on their previous lead in the NEWMAC swimming and diving championship

By Charlotte Brackett DAPER STAFF

With day two of the 2013 New England Women's and Men's Athletic Conference (NEWMAC) Swimming and Diving championships completed, the MIT men's team held on to the lead that they had established the day before. The Engineers won six of the seven events, bringing their point total to 750. Springfield College took over the second place spot with 438 points.

In the consolation final of the 200-yard medley relay, the MIT B relay touched first with a time of 1:31.98, just half a second off the

NEWMAC meet record of 1:31.41. The A relay, that consisted of Bradley A. Mattix '16, Benjamin R. Bauchwitz '15, Wyatt L. Ubellacker '13 and Kale T. Rogers '16 won the championship final with a time of 1:30.42. The relay easily broke their own NEWMAC meet record of 1:31.41 that had remained untouched since 2009 and earned an NCAA A cut.

With his time of 3:58.17 in the 400-yard individual medley, Alexander I. Lednev '16 broke the NEWMAC meet record of 4:01.05 and the NEWMAC open record of 3:59.64, both from 2012, finishing well under the B cut. Remy A. Mock '14 was second with his time of 4:04.36.

MIT placed five swimmers in the top eight in the 100-yard butterfly, taking the top four spots. Ubellacker touched first in 48.82, breaking his own meet record of 49.15 from 2011 and finishing well under the A cut. Sean R. Corcoran '16 came in second with a 49.83

Brendan T. Deveney '13 won his second individual title of the weekend when he touched first in the 200-yard freestyle with a time of 1:39.87, just off the meet record and the NCAA A cut. Anthony Chen '13 followed in second place in 1:41.10. Both easily earned B cuts. Maxwell T. Pruner '13 finished in fourth with a 1:41.63, and Daryl G. Neubieser '15 came in fifth place with his

Thursday, February 21

3 p.m. DuPont Tennis Courts

**UPCOMING HOME EVENTS** 

time of 1:42.90.

In the next event, the 100-yard breaststroke, Bauchwitz earned a B cut with his time of 57.27, which placed him second. Dion W. Low '16 followed in third place with a 57.74, also earning a B cut. Brendon W. Chiu '15 came in fourth with a 57.84, and Michael J. Liao '14 was fifth with his 57.91.

Mattix finished in first place in the 100yard backstroke with his time of 50.40, breaking the NEWMAC meet record of 50.66 that had remained untouched since 2005. Ron Rosenberg '13 came in second with a 51.37, and Corcoran was fourth with



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